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| APPLICATION NO. | FILING DATE                  | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|------------------------------|-------------------------|---------------------|------------------|
| 10/624,824      | 07/22/2003                   | Mark Sanders            | 1805-009            | 6566             |
| 28078           | 7590 09/19/2005              |                         | EXAMINER            |                  |
|                 | MOORE & BECK<br>CENTER/TOWER | CARRILLO, BIBI SHARIDAN |                     |                  |
|                 | MENT CIRCLE                  |                         | ART UNIT            | PAPER NUMBER     |
| INDIANAPO       | LIS, IN 46204                |                         | 1746                |                  |

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|--|--|--|---|-----------|
|  |  | Application No.  | Applicant(s)  | 7         |
| Office Action Summary  |  | 10/624,824   | SANDERS ET AL.  |           |
|  |  | Examiner   | Art Unit  |           |
|  |  | Sharidan Carrillo  | 1746  |           |
| Period f   | The MAILING DATE of this communication app<br>or Reply   | pears on the cover sheet with the  | correspondence address  |           |
| WHI0 - Extended after af | HORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING Does not so time may be available under the provisions of 37 CFR 1.11 of SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period vure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).   | ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti will apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONI | N.<br>mely filed<br>n the mailing date of this communicati<br>ED (35 U.S.C. § 133). | ·         |
| Status   |  |  |   |           |
| 1)⊠<br>2a)□<br>3)□   | Responsive to communication(s) filed on <u>American</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for alloward closed in accordance with the practice under Expression 1.  | action is non-final.<br>nce except for formal matters, pr  |   | is        |
| Disnosif   | tion of Claims   |  |   |           |
| 4)⊠<br>5)□   | Claim(s) 1-11 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-11 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/o  | wn from consideration.   |   |           |
| Applicat   | ion Papers   |  |   |           |
| 9)[  | The specification is objected to by the Examine  | er.  |   |           |
| 10)[   | The drawing(s) filed on is/are: a) acceptable acc | epted or b) objected to by the   | Examiner.   |           |
|  | Applicant may not request that any objection to the  | •  | ` •   |           |
|  | Replacement drawing sheet(s) including the correct   |  |   | (d).      |
| 11)[   | The oath or declaration is objected to by the Ex   | caminer. Note the attached Office  | Action or form PTO-152.   | •         |
| Priority :   | under 35 U.S.C. § 119  |  |   |           |
| a)   | Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priorical application from the International Bureausee the attached detailed Office action for a list   | s have been received.<br>s have been received in Applicat<br>nty documents have been receiv<br>u (PCT Rule 17.2(a)).   | ion No<br>ed in this National Stage   |           |
| Attachmen  | ut(s)  |  |   |           |
| 2) 🔲 Notic<br>3) 🔲 Infor   | ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date  | 4) Interview Summary<br>Paper No(s)/Mail D<br>5) Notice of Informal F<br>6) Other:   |   |           |
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## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-2, 5, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwarz (6253462).

Schwarz teaches a method of cleaning work pieces. The work pieces are held in the basket 18, the basket is introduced into the treatment vessel 1 which is flooded with a cleaning fluid. Cleaning fluid and/or gaseous medium are introduced into the treatment vessel through a discharge nozzle 8A, 8B. In reference to claim 5, refer to col. 6, lines 20-23. In reference to an aerated jet spray Schwarz teaches introducing the cleaning fluid and the gaseous medium are introduced through the spray unit into the liquid bath. Col. 8, lines 35-37 teaches gaseous medium comprising air. In reference to the pressure limitations of claim 10, refer to col. 8, lines 8-10 and col. 6, lines 17-19 which teaches pressures of 2-16 bar which reads on the claimed limitation.

## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 3-4, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz (6253462).

Schwarz is silent with respect to the type of chemical solutions used. However, it would have been within the level of the skilled artisan to select the type of chemical solution depending upon the amount and type of coating and /or contaminant to be removed from the substrate surface. Schwarz fails to teach the flow rate. However, it is well within the level of the skilled artisan to adjust the flow parameter depending upon the amount of contaminants present on the substrate surface. In reference to claims 9

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and 11, Schwarz fails to teach the flow rate of the jet spray or the pressurized air.

However, it would have been within the level of the skilled artisan to adjust the flow of the pressurized air and the cleaning fluid since Schwarz teaches the desire to increase the velocity, thereby enhancing the cleaning effect as a result of increased turbulence.

Additionally, it is well within the level of the skilled artisan to adjust the flow parameter depending upon the amount of contaminants present on the substrate surface.

7. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz (6253462) in view of Birang et al. (65554003).

Schwarz fails to teach recirculation or filtration. Birang teaches a method of cleaning a work piece. In fig. 1, Birang teaches submerging the work piece in tank 13. The fluid 19 is recirculated through pipe 23 and filtered through 27 to remove particulates. It would have been well within the level of the skilled artisan to have modified the method of Schwarz to include filtration and recirculation, as taught by Birang for economical purposes of reusing the cleaning fluid.

## Response to Arguments

- 8. The rejections of the claims as being anticipated by Soyoma or unpatentable over Soyoma in view of the secondary references are withdrawn in view of the arguments presented by applicant.
- 9. Applicant argues that Schwarz fails to teach removing a coating from a part using fluid which are effective to strip the coating from the part. Applicant's arguments are

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unpersuasive since Schwarz teaches using the cleaning fluid to remove residues from the workpiece.

- 10. Applicant argues that Schwarz fails to define the cleaning fluid. Applicant's arguments are unpersuasive since applicant's independent claims are not directed to any specific type of cleaning solution. Additionally, it is well within the level of the skilled artisan to select the type of chemical solution depending upon the type of contaminant to be removed.
- 11. Applicant argues that Schwarz fails tot each the fluid being aerated. In col. 2, lines 15-17, Schwarz teaches a spray unit with discharge nozzles for discharging cleaning fluid and a gaseous medium. Col. 12, lines 29-30 and col. 3, lines 38-41 teaches introducing a cleaning fluid and a gaseous medium. Additionally, claim 1 of Schwarz teaches a discharge nozzle or discharging the cleaning fluid and gaseous medium. In reference to aeration, col. 8, lines 35-37, teaches a gaseous medium of air. Therefore, the spraying of both air and cleaning fluid by the discharge nozzles reads on the limitations of an aerated jet spray. Additionally, applicant's claims fail to positively recite a step of aeration. As a result, spraying cleaning liquid into a bath having ambient air also reads on applicant's claim since there is no recitation in the claim of how the aeration is being produced.
- 12. Upon further review of the Schwarz reference, the allowable subject matter of claims 10-11, as indicated in the last Office Action is being withdrawn and a new grounds of rejection is being imposed as described above.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 571-272-1297. The examiner can normally be reached on M-W 6:30-4:00pm, alternating Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sharidan Carrillo Primary Examiner Art Unit 1746

bsc

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